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14. The RAMP project is designed to examine the key social context of intimate romantic relationships of active duty Army soldiers, and how interpersonal processes in this type of relationship can affect psychological functioning over time. The ultimate goal of this knowledge will be to enhance existing programs and therapies for military couples. This study consists of confidential online surveys, which are completed by active duty Army males recently returned from a deployment, along with their significant romantic partner. The study consists of a total of 5 surveys each for the service members and their female partners. During this report period, we completed recruitment for the study. After screening potential participants, we invited 719 couples to complete Survey 1. Of those invited, 593 couples completed Survey 1, which is an 82% response rate. After screening the initial sample for various factors, 281 couples were invited into Surveys 2 through 5. Response rates (on the individual level) so far are 98% for Survey 2, 94% for Survey 3, and 99% for Survey 4. Survey 5 was launched March 20 <sup>th</sup> , 2015 and therefore response rates are not available at this time. Initial preliminary analyses have begun. We presented three posters at the Association of Behavioral and Cognitive Therapies (ABCT) 2014 conference and 1 poster at the Rocky Mountain Psychological Association 2014 Conference. We have submitted three poster abstracts and four symposium abstracts for the 2015 ACBT Conference.					
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## Introduction

This report highlights the progress and accomplishments of “Relationship Factors Contributing to the Progression of Combat Related PTSD and Suicidality Over Time” during our third year of funding from March 2, 2014 to March 1, 2015. Please note that the public title we have selected for use in IRB review, with our participants, and throughout this report is the “Relationships Among Military Personnel (RAMP) Project”. The RAMP project is designed to examine the key social context of intimate romantic relationships of active duty Army soldiers, and how interpersonal processes in this type of relationship can affect psychological functioning over time. The ultimate goal of this knowledge will be to enhance existing programs and therapies for military couples. This study consists of confidential online surveys that are completed by active duty Army males recently returned from a hardship deployment, along with their significant romantic partner. Upon completion of the study, a total of 5 surveys will be administered to these couples during approximately a two-year time span.

The RAMP Project officially opened to participants on June 17, 2013. During this report period, we completed recruitment for the study. After screening potential participants, we invited 719 couples to complete Survey 1. Of those invited, 593 couples completed Survey 1, which is an 82% response rate. After screening the initial sample for various factors, 281 couples were invited into Surveys 2 through 5. Response rates (on the individual level) so far are 98% for Survey 2, 94% for Survey 3, and 99% for Survey 4. Survey 5 was launched March 20th, 2015 and therefore response rates are not available at this time. Primarily due to the setbacks in recruitment that led to a delay in enrolling participants, we completed a request for a No Cost Extension (NCE) year, including an updated scope of work, federal financial report, worksheet detailing how we will spend the remainder of the funding, and a cover letter to TATRC/USAMRMC to extend the project for 12 months (through 02-28-16). We received subsequent approval for the NCE, which will take place from March 1, 2015 – February 28, 2016.

Through this time, we have maintained an active research team, including volunteer undergraduate research assistants, staff, and subcontracted consultants and co-investigators. The team continues to refine and maintain detailed protocols for data checking and downloading, and ethics training for all study personnel (e.g., general human subjects certification, documented agreement to specific ethical practices regarding this study). Five University of Colorado Institutional Review Board (COMIRB) amendments were approved in the past year. The US Army Medical Research & Material Command (USAMRMC) Human Research Protection Office (HRPO) was advised each time. The study has received annual approval from COMIRB and HRPO for our continued efforts.

The specific aims for the RAMP project are:

- Aim 1:** To examine couple and partner responses to PTSD symptoms, and how these responses affect PTSD, relationship functioning, and psychological risk factors for suicide over time.
- Aim 2:** Examine additional PTSD and relationship predictors of psychological risk factors for suicide.
- Aim 3:** Assess mechanisms of the relationship between PTSD and relationship functioning over time.
- Aim 4:** Determine adaptive and maladaptive patterns of communication regarding combat.

## Body

In our approved Statement of Work, we proposed eight general task categories to accomplish our specific aims:

1. Hiring and orientation of project staff, purchasing and installing equipment
2. Finalizing initial item pool
3. Creating IRB applications, obtaining initial IRB approval, and maintaining compliance
4. Finalizing surveys
5. Developing and maintaining study materials and infrastructure
6. Recruitment
7. Executing online surveys
8. Analysis and dissemination

A narrative of significant accomplishments, issues encountered, and synopsis of key milestones for each quarter related to these SOW task categories 1-8 are provided in Sections I – IV. Following these quarterly narratives, bulleted lists of key accomplishments are provided in the next section, *Key Accomplishments*, which are organized by task category and quarter.

#### I. First Quarter (March 2, 2014 – June 30, 2014)

During this quarter, we submitted our Annual Report to the Office of the Assistant Secretary of Defense for Health Affairs and the United States Army Medical Research and Materiel Command (USAMRMC). We received COMIRB approval for a press release about the study. We completed subcontract renewals. We presented one poster at the Rocky Mountain Psychological Association and had three posters accepted for the 48<sup>th</sup> Annual Convention of the Association for Behavioral and Cognitive Therapies, to be held in Philadelphia, PA in November, 2014. We launched Survey 3 on March 3, 2014.

Key milestones this quarter:

- **FY14, Yr3, Q1, 03-03-14:** Survey 3 was launched.
- **FY14, Yr3, Q1, 03-03-14:** COMIRB approval for press release which was subsequently distributed.
- **FY14, Yr3, Q1 04-01-14:** Submitted Annual Report to the Office of the Assistant Secretary of Defense for Health Affairs and the United States Army Medical Research and Materiel Command (USAMRMC), detailing our progress and accomplishments over the past year, and received acknowledgment of annual continuation.
- **FY14, Yr3, Q1, 4-24-14:** Poster presented at the 2014 Rocky Mountain Psychological Association.
- **FY14, Yr3, Q1, 05-15-14:** Completed subcontract renewals.
- **FY14, Yr3, Q1, 05-16-14:** Three posters were accepted for the 48<sup>th</sup> Annual Convention of the Association for Behavioral and Cognitive Therapies, to be held in Philadelphia, PA in November, 2014.
- **FY14, Yr3, Q1, 06-30-14:** Recruitment completed.

#### II. Second Quarter (July 1, 2014 – September 30, 2014)

During this quarter, we received COMIRB approval for additional items to be added to S4 and S5. New staff and volunteers trained. Survey 4 launched on September 16, 2014. Enrollment completed.

Key milestones this quarter:

- **FY14, Yr3, Q2, 07-21-14:** COMIRB approval for added items to surveys 4 and 5.
- **FY14, Yr3, Q2, 08-20-14:** New staff hired, oriented, and trained.
- **FY14, Yr3, Q2, 08-28-14:** Enrollment complete.
- **FY14, Yr3, Q2, 09-13-14:** New volunteer oriented and trained.
- **FY14, Yr3, Q2, 09-16-14:** Survey 4 launched.

#### III. Third Quarter (October 1, 2014 – December 31, 2014)

During this quarter, we were approved for a No Cost Extension (NCE) to take place from March 1, 2015 – February 28, 2016. We obtained annual COMIRB approval through October 20, 2015. We also received COMIRB approval to update our study personnel and to add items to Survey 5. We completed Survey 2 data collection. We presented three posters at the 48<sup>th</sup> Annual Convention of the Association for Behavioral and Cognitive Therapies in Philadelphia, PA on November, 2014.

Key milestones this quarter:

- **FY14, Yr3, Q3, 10-17-14:** Received approval for a No Cost Extension from 3-1-15 through 2-28-16.
- **FY14, Yr3, Q3, 10-21-14:** Received certificate of approval from COMIRB to continue conducting research for another year, through 10-20-15.
- **FY14, Yr3, Q3, 10-27-14:** Received approval from COMIRB for amendment.
- **FY14, Yr3, Q3, 11-5-15:** Survey 2 now complete.
- **FY14, Yr3, Q3, 11-21-14:** Completed and presented three sets of analyses as posters at the 2014 Association of Behavioral and Cognitive Therapies (ABCT) Conference in Philadelphia, PA.

#### IV. Fourth Quarter (January 1, 2014 – March 1, 2015)

During this quarter, we received acknowledgement of annual continuation of the study from HRPO. We brought on three additional research assistants (RAs) to assist with data processing, coding, and cleaning. We submitted three poster abstracts and four symposium abstracts to the 2015 Association of Behavioral and Cognitive Therapies (ABCT). Surveys three and four are ongoing.

Key milestones this quarter:

- **FY15, Yr3 Q4, 01-25-15:** Three new Research Assistants (RAs) oriented and trained.
- **FY15, Yr3 Q4, 01-28-15:** Received acknowledgement of annual continuation of the study from HRPO.
- **FY15, Yr3, Q4, 02-10-15:** Received approval from COMIRB for amendment.
- **FY15, Yr3, Q4, 03-09-15:** Submitted three poster submissions and four symposium submissions to the 2015 Association of Behavioral and Cognitive Therapies (ABCT).

#### Key Research Accomplishments

Below are our key accomplishments, organized by task category and then quarter.

Table 1. Hiring and orientation of project staff, purchasing and installing equipment.

First Quarter	<ul style="list-style-type: none"><li>• Continue to transition and add new volunteer RAs. All RAs who join the project complete CITI human subjects training and a confidentiality and ethical agreement for the lab. All are under the oversight of the PI and GRAs and all training has been supplemented with regular meetings with core staff.</li><li>• Renewed all subcontracts through February 2015.</li></ul>
Second Quarter	<ul style="list-style-type: none"><li>• Hired, oriented, and trained an additional Graduate Research Assistant (GRA) and added additional volunteer RA.</li></ul>
Third Quarter	<ul style="list-style-type: none"><li>• No staff or equipment transitions.</li></ul>
Fourth Quarter	<ul style="list-style-type: none"><li>• Added three additional Research Assistants (RAs).</li></ul>

Table 2. Finalizing the initial item pool. –

First Quarter	<ul style="list-style-type: none"><li>• Item pool completely finalized, tested, and implemented for surveys 1, 2, and 3.</li></ul>
Second Quarter	<ul style="list-style-type: none"><li>• Item pool completely finalized, tested, and implemented for surveys 1, 2, 3, and 4.</li></ul>
Third Quarter	<ul style="list-style-type: none"><li>• Item pool completely finalized, tested, and implemented for surveys 1, 2, 3, and 4.</li></ul>
Fourth Quarter	<ul style="list-style-type: none"><li>• Item pool completely finalized, tested, and implemented for surveys 1, 2, 3, 4, and 5.</li></ul>

Table 3. Creating IRB applications, obtaining initial IRB approval, and maintaining compliance.

First Quarter	<ul style="list-style-type: none"><li>• Obtained IRB approval for a press release to be circulated about the study.</li><li>• Submitted a COMIRB amendment to add items to surveys 4 and 5.</li><li>• All staff continues to maintain compliance with ethical and confidential standards of the lab and IRB.</li></ul>
Second Quarter	<ul style="list-style-type: none"><li>• Obtained IRB approval for additional items to be added to surveys 4 and 5.</li><li>• All staff continues to maintain compliance with ethical and confidential standards of the lab and IRB.</li></ul>

Third Quarter	<ul style="list-style-type: none"> <li>• Obtained subsequent approval from COMIRB for further additional items to be added to survey 5 and to update our personnel.</li> <li>• Completed COMIRB annual report and received subsequent approval to continue to conduct research for another year.</li> <li>• All staff continues to maintain compliance with ethical and confidential standards of the lab and IRB.</li> </ul>
Fourth Quarter	<ul style="list-style-type: none"> <li>• Obtained IRB approval for additional items to be added to Survey 5.</li> <li>• All staff continues to maintain compliance with ethical and confidential standards of the lab and IRB.</li> </ul>

Table 4. Finalizing surveys for Phase 1 and Phase 2.

First Quarter	<ul style="list-style-type: none"> <li>• Survey 1 - 2 ongoing.</li> <li>• Survey 3 launched.</li> <li>• Surveys 4 and 5 in preparation.</li> </ul>
Second Quarter	<ul style="list-style-type: none"> <li>• Survey 1 – 3 ongoing.</li> <li>• Survey 4 launched.</li> <li>• Survey 5 in preparation.</li> </ul>
Third Quarter	<ul style="list-style-type: none"> <li>• Survey 1 – 4 ongoing.</li> <li>• Survey 5 in preparation.</li> </ul>
Fourth Quarter	<ul style="list-style-type: none"> <li>• Surveys 1 and 2 complete.</li> <li>• Survey 3 and 4 ongoing.</li> <li>• Survey 5 content is finalized and will be launched in late March 2015.</li> </ul>

Table 5. Developing and maintaining study materials and infrastructure.

First Quarter	<ul style="list-style-type: none"> <li>• Maintain gift card system to ensure proper and timely payment to our participants.</li> <li>• Continue to develop and improve processes for data downloads, cleaning, checking, and scoring.</li> <li>• Record methodological processes and outcomes</li> </ul>
Second Quarter	<ul style="list-style-type: none"> <li>• Continue processes documented above.</li> </ul>
Third Quarter	<ul style="list-style-type: none"> <li>• Continue processes documented above.</li> </ul>
Fourth Quarter	<ul style="list-style-type: none"> <li>• Continue processes documented above.</li> </ul>

Table 6. Recruitment.

First Quarter	Complete.
Second Quarter	Complete.
Third Quarter	Complete.
Fourth Quarter	Complete.

Quarter	
Table 7. Executing online surveys.	
First Quarter	<ul style="list-style-type: none"> <li>As of June 30, 2014: A total of 1256 (628 couples) individuals were fully qualified and have been sent Survey 1 invitations, 1037 participants (including 483 matched couples) completed Survey 1, 364 Survey 2 invitations sent (182 couples), 339 participants completed Survey 2 (including 161 matched couples), 110 Survey 3 invitations sent (55 couples), 97 participants completed Survey 3 (including 48 matched couples).</li> <li>Processes for identifying false responders continue through all quarters.</li> </ul>
Second Quarter	<ul style="list-style-type: none"> <li>As of September 30, 2014: A total of 1438 individuals were fully qualified and have been sent Survey 1 invitations, 1204 individuals (567 matched couples) have completed Survey 1. 572 Survey 2 invitations have been sent (286 couples), 534 individuals (256 couples) have completed Survey 2. 180 survey 3 invitations have been sent (90 couples), 169 individuals (79 couples) have completed Survey 3. 38 Survey 4 invitations have been sent (19 couples), 34 individuals (16 couples) have completed Survey 4.</li> </ul>
Third Quarter	<ul style="list-style-type: none"> <li>As of December 31, 2014: A total of 1438 individuals (i.e., 719 couples) were fully qualified and were sent Survey 1 invitations. 1204 individuals (567 couples) completed Survey 1. 281 couples passed Survey 1 screens and will be invited into the longitudinal phase of the project (Surveys 2-5). 551 individuals have completed Survey 2. Survey 3 invitations have been sent to 390 individuals (i.e., 195 couples). 351 individuals have completed Survey 3. Survey 4 invitations have been sent to 110 individuals (i.e., 55 couples). 106 individuals have completed Survey 4.</li> </ul>
Fourth Quarter	<ul style="list-style-type: none"> <li>As of March 1, 2015: A total of 1438 individuals (i.e., 719 couples) were fully qualified and were sent Survey 1 invitations. 1269 individuals (593 couples) have completed Survey 1. Survey 1 now completed. Survey 2 invitations have been sent to 281 couples. 271 couples have completed Survey 2. Survey 2 now completed. Survey 3 invitations have been sent to 550 individuals (i.e., 275 couples). 484 individuals (230 couples) have completed Survey 3. Survey 4 invitations have been sent to 152 individuals (i.e., 76 couples). 145 individuals (67 couples) have completed Survey 4.</li> </ul>

Table 8. Analysis and dissemination

First Quarter	<ul style="list-style-type: none"> <li>An honors thesis based on the project was successfully defended and presented at the Rocky Mountain Psychological Conference.</li> <li>3 poster abstracts accepted to the 48<sup>th</sup> Annual Convention of the Association for Behavioral and Cognitive Therapies, to be held in Philadelphia, PA in November, 2014.</li> </ul>
Second Quarter	<ul style="list-style-type: none"> <li>Nothing this quarter.</li> </ul>
Third Quarter	<ul style="list-style-type: none"> <li>Three sets of analyses were completed and presented as posters at the November 2014 Association of Behavior and Cognitive Therapies Convention in Philadelphia, PA.</li> </ul>
Fourth Quarter	<ul style="list-style-type: none"> <li>Three poster abstracts and four symposium abstracts were submitted to the Association of Behavioral and Cognitive Therapies (ABCT) 2015 conference, to be held in Chicago, IL in November 2015. Acceptance decisions will be sent out in May.</li> </ul>



## Reportable Outcomes

Four posters were presented at conferences this year (see References). Employment or research opportunities received based on experience/training supported by this grant include: training and experience to two compensated Graduate Students and one Professional Research Assistant (who graduated from University of Colorado Denver December 2014), training and experience to six volunteer undergraduate Research Assistants this year, and subcontracts with four co-investigators. We have developed several measures for this study; our data collection will allow us to test and refine them. As of March 1, 2015, 593 couples have completed Survey 1 and 271 couples have completed Survey 2. Data collection is ongoing for Surveys 3 and 4, and Survey 5 will be launched in March 2015.

## Conclusions

This report highlights the progress and accomplishments during the third year of funding (March 2, 2014 to March 1, 2015) for the study: “Relationship Factors Contributing to the Progression of Combat Related PTSD and Suicidality Over Time” (publically known as the Relationships Among Military Personnel [RAMP] Project). We completed recruitment. We completed data collection from surveys 1 and 2. Surveys 3 and 4 are ongoing. Survey 5 will be launched in March 2015.

During this past year, we provided training and experience for 6 undergraduate Research Assistants (RAs) including CITI human subjects training, ethical and confidentiality training, weekly lab meetings, and supervision from study personnel.

We have submitted five COMIRB amendments and received approvals for minor modifications such as: (a) hiring one new graduate research assistants (b) continually updating and improving the item pool to be used across all five surveys, (c) approval for a press release about the study.

We received a one year no-cost extension (NCE) for March 1, 2015 – February 28, 2016.

We have submitted five poster abstracts and two symposium abstracts to the 2015 Association of Behavioral and Cognitive Therapies (ABCT).

We feel prepared going into Year 4 (NCE), and look forward to providing our funders with updates on the project. Thank you for the opportunity to conduct this work and share our progress.

## References

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